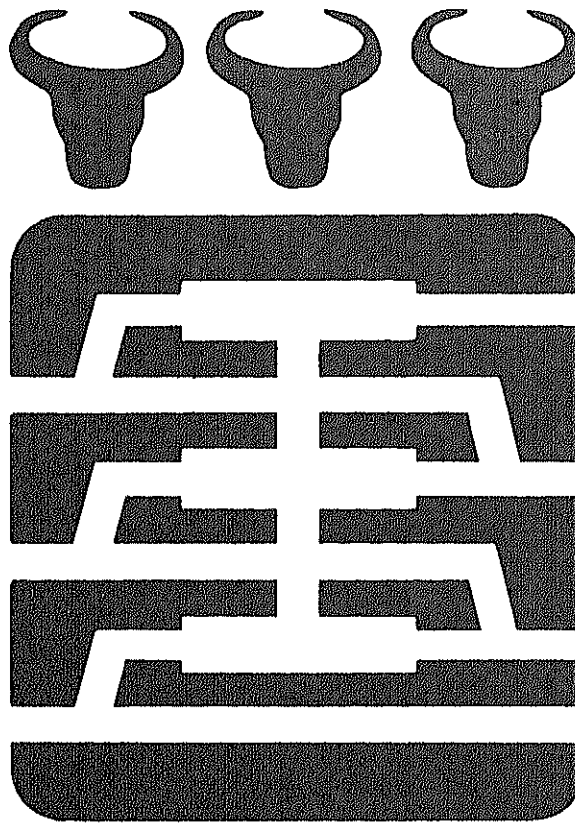


SUPPLEMENT TO MARKETING RESEARCH REPORT 107B

CONTRACT INTEGRATED, COOPERATIVE CATTLE MARKETING SYSTEM



FARMER COOPERATIVE SERVICE

U.S. DEPARTMENT OF AGRICULTURE

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Supplement to Marketing Research Report 1078

A CONTRACT INTEGRATED,
COOPERATIVE CATTLE MARKETING SYSTEM

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This report contains supplemental information to A Contract Integrated, Cooperative Cattle Marketing System. It is intended for use by producers and cooperative boards of directors and management interested in implementing such an integrated marketing system.

This supplement contains a sample marketing agreement and sample custom feeder cattle growing, cattle finishing, and cattle slaughtering contracts. Sample legal documents are examples only and should not be used as binding documents. They should be prepared or reviewed by an attorney in collaboration with the cooperative's management and board of directors to ensure that they meet statutory requirements and the needs of the cooperative and its members.

An example of how a cooperative might develop a set of criteria to describe cattle and paper pool them with computer assistance is discussed. The example also illustrates potential advantages of cattle pooling.

Sample forms in the legal documents and other sample forms show the types of data producers can provide the cooperative and how the cooperative can use that data in the marketing effort.

Finally, two methods of analyzing teleauction prices are discussed. One method is quite simple, but provides less specific information; and thus, the two examples illustrate the trade-off between level of difficulty and usefulness of results.

SAMPLE MARKETING AGREEMENT

This agreement made by and between _____, herein referred to as Association and _____, herein referred to as Producer;

WITNESSETH:

WHEREAS, Association is a cooperative association engaged in marketing and processing (including slaughtering) cattle and products derived therefrom; and

WHEREAS, Producer is a bona fide cattle producer and is eligible for membership in Association, and Producer believes it to his advantage to have Association market and process his cattle and products derived therefrom, hereinafter referred to as cattle;

NOW THEREFORE, the parties hereby agree as follows:

Application for Membership -- By signing this agreement and paying (for example) one hundred dollars (\$100), Producer applies for membership in Association; and by signing this agreement and issuing to Producer a certificate of membership, Association accepts thereof.

Agreement to Market and Process -- Producer agrees to market and process through Association and Association agrees to market and process on behalf of Producer, all cattle except cattle sold for breeding purposes, currently and hereafter owned by Producer or produced under his control in the territory served by Association, as described in the appendix to this agreement.

Producer shall retain possession of and properly maintain and care for cattle prior to the time such cattle are loaded unto proper conveyance for shipment and delivery to place or places designated by Association, and Producer shall retain all risks of loss while he retains possession of such cattle and while such cattle are enrolled in one or more contract integration options. An absolute title to all cattle shall pass to buyer at the time cattle are sold.

Association shall make rules and regulations regarding the receiving, handling, inspecting, identifying, weighing, grading, pooling, processing, storing, shipping, and related functions of marketing and processing cattle, and provide inspectors and graders to grade such cattle. Producer agrees to observe and conform to such rules and regulations and accept the grading standards established by Association. Producer grants Association the right to enter the premises where Producer maintains cattle for inspecting and grading such cattle, and other purposes Association believes necessary.

Bargaining Agent -- Producer appoints Association its sole and exclusive agent to bargain and contract with third parties for cattle production, marketing, and processing services. Such contracts must be approved by the board of directors and when properly executed shall form a part of this agreement.

Payment to Producer -- Association shall pay Producer his proportionate share of the total proceeds derived from marketing and processing cattle hereunder less deductions for (1) advances, (2) operating and maintenance costs of Association, and (3) capital retains for the Revolving Fund as provided in the Bylaws.

Producer shall notify Association of any and all ownership interests and liens against cattle to be marketed and processed hereunder, and authorizes Association to pay the holder of such liens before any payment is made to Producer.

Term of Agreement -- This agreement shall commence on the date such agreement is signed by the parties hereto and continue in force for the

remainder of this calendar year plus three (3) consecutive calendar years, and thereafter from year to year until cancelled by either party in writing at least sixty (60) days prior to the end of the calendar year. Unless cancelled as provided herein or in the Bylaws, Producer shall provide to Association between the first and last day of November each year on forms furnished by Association (similar to the appendix to this agreement) a description of cattle covered hereunder for the subsequent calendar year.

Breach of Contract -- This agreement is one of a series, and all members of the Association have a valuable and special interest in the strict performance by all contracting parties. The amount of damages to Association resulting from any breach of this contract would be impossible to ascertain with accuracy. Therefore, Producer in the event of any breach hereof shall pay to Association as liquidated damages an amount of (for example) twenty dollars (\$20.00) per hundredweight or one hundred dollars (\$100.00) per head whichever is greater for such cattle not marketed and processed as provided herein, and Producer shall pay all costs and expenses of litigation arising therefrom. Further, Association shall, if it desires, terminate membership of Producer but such Producer after a lapse of (for example) two (2) years shall again be eligible for membership in Association.

Excused Performance -- In the event the performance of this agreement by either party hereto is prevented or delayed by act of God, war, civil insurrection, fire, flood, storm, strike, lockout, failure of machinery, equipment or material, or bylaw, regulation or order of federal, state or local authorities, or by any other cause beyond the reasonable control of such party, then the performance of this agreement by such party to the extent it is prevented or delayed, shall be excused.

Articles of Incorporation and Bylaws -- Producer agrees to abide and be bound by the Articles of Incorporation and Bylaws of Association, now in force or that will hereafter be adopted, and amended. The parties agree that there are no oral or other conditions, promises, covenants, representations, or inducements in addition to, or at variance with any terms herein.

IN WITNESS WHEREOF, the parties have read, understood, and voluntarily subscribed their names to this agreement.

Signed on the _____ day of _____, 19__.

Producer _____

Social Security Number _____

Mailing address _____

Witnessed by _____

Accepted on the _____ day of _____, 19__

Association _____

By _____
Chief Executive Officer; or President, Board of Directors

Marketing Agreement Appendix

A. Estimated Cattle Inventory, January 1, 19__.

	<u>Number of head</u>	
	<u>Beef</u>	<u>Dairy</u>
1. Cows that have calved	_____	_____
2. Replacement heifers over 500 pounds	_____	_____
3. Bulls (for breeding) over 500 pounds	_____	_____
4. Steers, nonreplacement heifers, and bulls (not for breeding) over 500 pounds	_____	_____
5. Steers, heifers, and bulls under 500 pounds	_____	_____

B. Estimated increase in cattle numbers, January 1 to December 31, 19__.

	<u>Number of head</u>	
	<u>Beef</u>	<u>Dairy</u>
1. Purchases of cows that have calved and replacement heifers over 500 pounds	_____	_____
2. Purchases of bulls (for breeding) over 500 pounds	_____	_____
3. Purchases of steers, nonreplacement heifers, and bulls (not for breeding) over 500 pounds	_____	_____
4. Purchases of steers, heifers, and bulls under 500 pounds	_____	_____
5. Calf crop	_____	_____

C. Marketing and Contract Integration Plans, January 1 to December 31, 19__.

1. Feeder steers, heifers, and bulls. Fill in the table below, using the following codes.

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
S = Steers	1 = 0 - 399	HC = High choice	A = <u>Place in contract</u>
H = Heifers	2 = 400 - 499	LC = Low choice	<u>growing option</u>
B = Bulls	3 = 500 - 599	GD = Good	B = <u>Market from contract</u>
	4 = 600 - 699	ST = Standard	<u>growing option</u>
	5 = 700 - 799		C = <u>Place in contract</u>
	6 = 800 - 899		<u>finishing option</u>
	7 = 900 - 999		

<u>Month</u>	<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
Jan.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Feb.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Mar.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Apr.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
May	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Jun.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Jul.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Aug.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Sep.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Oct.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Nov.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
Dec.	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____

2. Slaughter steers, heifers, and bulls. Fill in the table below, using the following codes.

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
S = Steers	1 = 0 - 399	HC = High choice	B = <u>Market from</u> contract
H = Heifers	2 = 400 - 499	LC = Low choice	<u>growing</u> option
B = Bulls	3 = 500 - 599	GD = Good	
	4 = 600 - 699	ST = Standard	D = <u>Market from</u> contract
	5 = 700 - 799		<u>finishing</u> option
	6 = 800 - 899		
	7 = 900 - 999		E = <u>Place in</u> contract
	8 = 1,000 - 1,099		<u>slaughtering</u> option
	9 = 1,100 - 1,199		
	10 = 1,200 - 1,299		
	11 = 1,300 and over		

<u>Month</u>	<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
Jan.					
Feb.					
Mar.					
Apr.					
May					
Jun.					
Jul.					
Aug.					
Sep.					
Oct.					
Nov.					
Dec.					

3. Cull cows and herd bulls. Fill in the table below, using the following codes.

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
C = Cows	4 = 600 - 699	HC = High choice	E = <u>Place in contract</u>
B = Bulls	5 = 700 - 799	LC = Low choice	<u>slaughtering opt.</u>
	6 = 800 - 899	GD = Good	
	7 = 900 - 999	ST = Standard	
	8 = 1,000 - 1,099		
	9 = 1,100 - 1,199		
	10 = 1,200 - 1,299		
	11 = 1,300 and over		

<u>Month</u>	<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Integration</u>
Jan.					
Feb.					
Mar.					
Apr.					
May					
Jun.					
Jul.					
Aug.					
Sep.					
Oct.					
Nov.					
Dec.					

SAMPLE FEEDER CATTLE GROWING CONTRACT

This agreement made by and between _____, herein referred to as Association; _____, herein referred to as Producer; and _____, herein referred to as Custom Grower.

WITNESSETH:

WHEREAS, Association is a cooperative association engaged in marketing and processing cattle and products derived therefrom and is the sole and exclusive bargaining agent for Producer,

WHEREAS, Producer is a member of Association and believes it to his advantage to have Custom Grower perform specified services on Producer's cattle and products derived therefrom, herein referred to as cattle; and

WHEREAS, Custom Grower desires and is able to perform specific services relating to the production and processing of cattle;

NOW THEREFORE, the parties hereby agree as follows:

Delivery and Services -- Producer agrees to deliver to Custom Grower, at place or places agreed to by the parties hereto, cattle described in the appendix hereto. Association shall notify Custom Grower at least thirty (30) days in advance of the date cattle covered hereunder are scheduled to be delivered to the premises of Custom Grower and such notice shall specify the expected delivery date. Producer agrees that such cattle shall weigh at least four hundred (400) pounds, be clearly identified, dehorned, wormed, weaned, male cattle castrated, free from any contagious disease, not crippled, deformed, blind, or in any other nonmerchantable condition at the time such cattle are loaded onto proper conveyance for shipment and delivery to Custom Grower. Upon delivery, Custom Grower agrees to assume responsibility for the care and maintenance of such cattle, including but not limited to providing facilities, feed and water, veterinary services, and animal health care products, and other services Custom Grower and Association agree are necessary or desirable. Custom Grower shall not be responsible for cattle deaths unless caused by negligence.

Custom Grower shall keep a file on each delivered lot or pen of cattle showing total gain, average daily gain, and cost per pound of gain on cattle delivered hereunder. Custom Grower agrees to observe and conform to any other rules and regulations made by Association regarding feeding programs, animal health care records, death loss reporting, identifying, weighing, and related functions of producing cattle. Such rules and regulations may be attached to and considered a part of this agreement.

Custom Grower grants Association the right to enter the premises where Custom Grower maintains cattle covered hereunder for inspection, grading, and other purposes Association believes necessary.

Billing and Payment Procedures -- Custom Grower agrees to charge Producer a pasture or yardage fee, a charge for feed and animal health care, and separate charges for specific services, in accordance with the following rate table:

<u>Service or activity</u>	<u>Cost or charge</u>
Pasture or yardage	\$_____ per head per day
Feed	Based on the price at a specified time and place
Veterinary and animal health care	Based on actual cost to Custom Grower
Other Services	

Custom Grower agrees to provide Producer a complete breakdown of feed used, kind, and price on each billing. Custom Grower agrees to bill Producer through Association twice each month, on the first and fifteenth day, and Producer agrees to pay Custom Grower through Association every thirty (30) days, on the first day of each month, for cattle covered hereunder. Final payment to Custom Grower shall be made by Producer within fifteen (15) days of the date such cattle are shipped from the premises of Custom Grower.

Should Producer fail to pay Custom Grower through Association within thirty (30) days of the date payment is due, Association has the right to market and process such cattle and pay Custom Grower prior to making any payment to Producer.

Term of Agreement -- This agreement becomes effective on the date signed by the parties hereto and shall continue in force until terminated as provided herein. Association shall notify Custom Grower at least seven (7) days in advance of the date cattle covered hereunder are scheduled to be shipped from the premises of Custom Grower and such notice shall specify the expected shipment date. Such notice shall constitute notice to terminate this agreement.

Excused Performance -- In the event the performance of this agreement by any party hereto is prevented or delayed by act of God, war, civil insurrection, fire, flood, storm, strike, lockout, failure of machinery, equipment or material, or bylaw, regulation or order of federal, state or local authorities, or by any other cause beyond the reasonable control of such party, then the performance of this agreement by such party to the extent it is prevented or delayed, shall be excused.

IN WITNESS WHEREOF, the parties have read, understood, and voluntarily subscribed their names to this agreement.

Signed on the ____ day of _____, 19____.

Producer _____

Association _____

Chief Executive Officer; or President, Board of Directors

Custom Grower _____

Name and Title

Feeder Cattle Growing Contract--Appendix

Description of feeder steers, heifers, and bulls placed in custom feeder cattle growing option.

- A. When do you prefer to have cattle delivered to custom grower (indicate a first and second preference)?

<u>Preference</u>		<u>Month</u>
_____	First third	_____
_____	Middle third	_____
_____	Last third	_____

- B. Description of cattle (use the following code).

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
S = Steers	1 = 0-399	HC = High choice
H = Heifers	2 = 400-499	LC = Low choice
B = Bulls	3 = 500-599	GD = Good
	4 = 600-699	ST = Standard
	5 = 700-799	
	6 = 800-899	
	7 = 900-999	

<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

SAMPLE CATTLE FINISHING CONTRACT

This agreement made by and between _____, herein referred to as Association; _____, herein referred to as Producer; and _____, herein referred to as Custom Feeder.

WITNESSETH:

WHEREAS, Association is a cooperative association engaged in marketing and processing (including slaughtering) cattle and products derived therefrom and is the sole and exclusive bargaining agent for Producer;

WHEREAS, Producer is a member of Association and believes it to his advantage to have Custom Feeder perform specified services on Producer's cattle and products derived therefrom, herein referred to as cattle;

WHEREAS, Custom Feeder desires and is able to perform specific services relating to the production and processing of cattle;

NOW THEREFORE, the parties hereby agree as follows:

Delivery and Services -- Producer agrees to deliver to Custom Feeder at place or places agreed to by the parties hereto, cattle described in the appendix hereto. Association shall notify Custom Feeder at least thirty (30) days in advance of the date cattle covered hereunder are scheduled to be delivered to the premises of Custom Feeder and such notice shall specify the expected delivery date. Producer agrees that such cattle shall weigh at least six hundred (600) pounds, be clearly identified, dehorned, wormed, male cattle castrated, free from any contagious disease, not crippled, deformed, blind, or in any other nonmerchantable condition at the time such cattle are loaded onto proper conveyance for shipment and delivery to Custom Feeder.

Upon delivery, Custom Feeder agrees to assume responsibility for the care and maintenance of such cattle, including but not limited to providing pens and other facilities, feed and water, veterinary services and animal health care products, and other services Custom Feeder and Association agree are necessary or desirable. Custom Feeder shall not be responsible for cattle deaths unless caused by negligence.

Custom Feeder shall keep a file on each delivered lot or pen of cattle showing total gain, average daily gain, feed conversion, and cost per pound of gain on cattle delivered hereunder. Custom Feeder agrees to observe and conform to any other rules and regulations made by Association regarding feeding programs, animal health care records, death loss reporting, identifying, weighing, and related functions of producing cattle. Such rules and regulations may be attached to and considered a part of this agreement.

Custom Feeder grants Association the right to enter the premises where Custom Feeder maintains cattle covered hereunder for inspecting, grading, and other purposes Association believes necessary.

Billing and Payment Procedure -- Custom Feeder agrees to charge Producer a yardage fee, a charge for feed and feed processing, animal health care, and separate charges for specific services, in accordance with the following rate table:

<u>Service or activity</u>	<u>Cost or Charge</u>
Yardage	\$_____ per head per day
Feed	Based on the price at a specified time and place.
Feed processing	\$_____ per ton
Veterinary and animal health care	Based on actual cost to Custom Feeder
Other services	

Custom Feeder agrees to provide Producer a complete breakdown of feed used, kind, and price on each billing. Custom Feeder agrees to bill Producer through Association twice each month, on the first and fifteenth day, and Producer agrees to pay Custom Feeder through Association every thirty (30) days, on the first day of each month, for cattle covered hereunder. Final payment to Custom Feeder shall be made by Producer within fifteen (15) days of the date such cattle are shipped from the premises of Custom Feeder.

Should Producer fail to pay Custom Feeder through Association within thirty (30) days of the date payment is due, Association has the right to market and process such cattle and pay Custom Feeder prior to making any payment to Producer.

Term of Agreement -- This agreement becomes effective on the date signed by the parties hereto and shall continue in force until terminated as provided herein. Association shall notify Custom Feeder at least seven (7) days in advance of the date cattle covered hereunder are scheduled to be shipped from the premises of Custom Feeder and such notice shall specify the expected shipment date. Such notice shall constitute notice to terminate this agreement.

Excused Performance -- In the event the performance of this agreement by any party hereto is prevented or delayed by act of God, war, civil insurrection, fire, flood, storm, strike, lockout, failure of machinery, equipment or material, or bylaw, regulation or order of federal, state or local authorities, or by any other cause beyond the reasonable control of such party, then the performance of this agreement by such party to the extent it is prevented or delayed, shall be excused.

IN WITNESS WHEREOF, the parties have read, understood, and voluntarily subscribed their names to this agreement.

Signed on the ____ day of _____, 19__.

Producer _____

Association _____
Chief Executive Officer; or President, Board of Directors

Custom Feeder _____
Name and Title

Cattle Finishing Contract--Appendix

Description of feeder steers, heifers, and bulls placed in custom finishing option.

- A. When do you prefer to have cattle delivered to custom feeder (indicate a first and second preference)?

<u>Preference</u>		<u>Month</u>
	First third	
	Middle third	
	Last third	

- B. Description of cattle (use the following code).

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
S = Steers	1 = 0-399	HC = High choice
H = Heifers	2 = 400-499	LC = Low choice
B = Bulls	3 = 500-599	GD = Good
	4 = 600-699	ST = Standard
	5 = 700-799	
	6 = 800-899	
	7 = 900-999	

<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>

SAMPLE CATTLE SLAUGHTERING CONTRACT

This agreement made by and between _____, herein referred to as Association; _____, herein referred to as Producer; and _____, herein referred to as Custom Packer.

WITNESSETH:

WHEREAS, Association is a cooperative association engaged in marketing and processing (including slaughtering) cattle and products derived therefrom and is the sole and exclusive bargaining agent for Producer;

WHEREAS, Producer is a member of Association and believes it to his advantage to have Custom Packer perform specified services on Producer's cattle and products derived therefrom, herein referred to as cattle; and

WHEREAS, Custom Packer desires and is able to perform specific services relating to the production and processing of cattle;

NOW THEREFORE, the parties hereby agree as follows:

Delivery and Services -- Producer agrees to deliver to Custom Packer, at place or places agreed to by the parties hereto, cattle described in the appendix hereto. Association shall notify Custom Packer at least thirty (30) days in advance of the date cattle covered hereunder are available for delivery to the premises of Custom Packer and such notice shall specify a seven (7) day range of delivery dates. Upon receipt of such notice Custom Packer shall notify Association at least fifteen (15) days in advance of the specific date and time Custom Packer desires such cattle to be delivered. Producer agrees that such cattle shall be in condition to be slaughtered (meat derived therefrom should be suitable for human consumption) at the time such cattle are loaded onto proper conveyance for shipment and delivery to Custom Packer; or if any cattle delivered hereunder are not in such condition, such cattle shall be handled in a manner agreed to by the parties hereto prior to delivery. Upon delivery, Custom Packer agrees to assume responsibility for the care and maintenance of such cattle prior to slaughtering. Custom Packer shall not be responsible for cattle deaths prior to slaughtering unless caused by negligence.

Custom Packer agrees to cooperate in all respects with the U.S. Department of Agriculture's carcass data service program of the Agricultural Marketing Service, or similar program instituted by Association. Custom Packer agrees to observe and conform to any other rules and regulations made by Association regarding the receiving, weighing, and related functions of slaughtering cattle. Such rules and regulations may be attached to and considered a part of this agreement.

Custom Packer grants Association the right to enter the premises where Custom Packer maintains and slaughters cattle covered hereunder

for inspecting, grading, and other purposes Association believes necessary.

Billing and Payment Procedure -- Custom Packer agrees to charge Producer a base slaughtering fee less drop, and separate charges for specific slaughtering and other services, agreed to by Association and Custom Packer in accordance with the following rate table:

<u>Service or activity</u>	<u>Cost or charge</u>
Base slaughtering fee*	\$_____ per head
Holding period	_____ per head per day
Other services	

*Producer agrees to pay a base slaughtering fee less the value of the drop, based on a mutually agreeable price quotation. In the event drop value exceeds base slaughtering fee, Custom Packer agrees to pay Producer the difference through Association.

Custom Packer agrees to present an itemized bill to Producer through Association within seven (7) days after slaughtering cattle covered hereunder, and Producer agrees to pay Custom Packer through Association within fifteen (15) days following receipt of such billing.

Term of Agreement -- This agreement becomes effective on the date signed by the parties hereto and shall continue in force until all cattle covered hereunder are slaughtered as specified herein.

Excused Performance -- In the event the performance of this agreement by any party hereto is prevented or delayed by act of God, war, civil insurrection, fire, flood, storm, strike, lockout, failure of machinery, equipment or material, or bylaw, regulation or order of federal, state or local authorities, or by any other performance of this agreement by such party, then the performance of this agreement by such party to the extent it is prevented or delayed, shall be excused.

IN WITNESS WHEREOF, the parties have read, understood, and voluntarily subscribed their names to this agreement.

Signed on the _____ day of _____, 19__.

Producer _____

Association _____
Chief Executive Officer; or President, Board of Directors

Custom Packer _____
Name and Title

Cattle Slaughtering Contract--Appendix

Description of slaughter steers, heifers, and bulls; and cull cows and herd bulls placed in custom cattle slaughtering option.

- A. Indicate the earliest date cattle are available for delivery to custom packer. (Cattle will be delivered within 7 calendar days following that date.)

Month _____ Date _____

- B. Description of cattle (use the following codes).

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
S = Steers	1 = 0- 399	HC = High choice
H = Heifers	2 = 400- 499	LC = Low choice
C = Cows	3 = 500- 599	GD = Good
B = Bulls	4 = 600- 699	ST = Standard
	5 = 700- 799	
	6 = 800- 899	
	7 = 900- 999	
	8 = 1,000-1,099	
	9 = 1,100-1,199	
	10 = 1,200-1,299	
	11 = 1,300 and over	

<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

DESCRIPTION MARKETING AND COMPUTER-ASSISTED POOLING

An example is presented and discussed to illustrate how feeder cattle are pooled on paper with computer assistance prior to marketing them via a teleauction exchange, and to illustrate how a cooperative might develop its own criteria for grading and describing cattle. The sample grading and description criteria were adapted from a grading system for feeder cattle proposed by the Southern Beef Council, and grading and description criteria currently used by a midwest cooperative (table 1). ^{1/ 2/} It is presented here as one example, for illustrative purposes only. Though most applicable to feeder cattle, the sample system is applied in this report to other classes of cattle. Elements of the system were included but not discussed in the appendix to the marketing agreement and in the appendix to each forward integration contract.

Paper pooling does not require using a computer, but a computer can save time and costs. Marketing cooperatives without computer equipment are not encouraged to purchase or lease such facilities solely for pooling cattle. Businesses and universities often share computer time and may perform required keypunching for a relatively low fee, compared with purchasing or leasing computer equipment and hiring operating personnel.

For this pooling example, hypothetical consignments to a feeder cattle auction were developed for 50 producers. Consignments were based on a special feeder cattle auction and published data, and followed guidelines designed to produce consignments closely representing actual consignments. A summary of consignments by descriptive trait is presented in table 2.

Fifty hypothetical producers consigned 1,172 head of cattle. They were sorted into 276 small but uniform lots. Then, a computer program sorted those lots by sex, weight, grade, herd class, and condition into 150 uniform lots after keypunching cattle descriptions onto data cards. ^{3/} The computer routine sorted cards (each card represented one lot of uniformly described cattle) into two sexes; each sex into five weight groups; each sex-weight combination into four grades; each sex-weight-grade combination into four herd classes; and each sex-weight-grade-herd combination into three condition classes. By combining condition classes, 4 additional condition classes were formed, and the number of pooled lots was reduced further, to 106. Condition classes added were: thin/normal (T/N), normal/thin (N/T), normal/fleshy (N/F),

^{1/} L.S. Pope, "Proposed feeder grades measure feedlot performance," in Feedlot Management, August 1975, pp. 8-11.

^{2/} MFA Livestock Association, Inc., in Marshall, Missouri.

^{3/} The computer routine was programmed in Easytrieve, an information retrieval and data management software system developed by Pansophic Systems, Inc., Oakbrook, Illinois.

and fleshy/normal (F/N). The thin/normal class had more thin than normal cattle; normal/thin, more normal than thin; and similarly for other groups. For this example, the cost for keypunching and computer time, excluding the one-time programming cost, was slightly more than one cent per head.

Using past results as a guide, prices were assigned to each of the 276 prepooled and 106 pooled lots of cattle. Price differentials for descriptive traits are shown in table 3. A base lot (2 to 9 head of low choice steers weighing 400 to 499 pounds from a C herd and in normal condition) was assigned an assumed sale price of \$34.62 per hundredweight. Sale prices for prepooled and pooled lots were the cumulative sum of price differences for traits varying from those of the base lot.

After pooling, 213 lots or 77 percent of the prepooled lots received a higher price; 54 lots or 20 percent received the same price; and 9 lots or 3 percent received a lower price. Of the 50 hypothetical producers, 49 earned higher gross returns; and one, the same returns. Average gross revenue increase per consignor was \$114.98; average gross revenue increase per head, \$4.93. Pooling benefited large producers as well as small ones, though small ones benefited more (table 4).

Table 1 -- Descriptive traits in a sample system of grading and describing cattle

Descriptive Trait :	Explanation	: Keypunching Code
Cattle class	Feeder steers, heifers, and bulls (cattle sold for further feeding)	A
	Slaughter steers, heifers, and bulls (cattle sold for slaughter)	B
	Cull Cows and herd bulls (cattle sold for slaughter)	C
Sex	Steers	S
	Heifers	H
	Cows	C
	Bulls	B
Weight	0 - 399 (pounds)	1
	400-499	2
	500-599	3
	600-699	4
	700-799	5
	800-899	6
	900-999	7
	1,000-1,099	8
	1,100-1,199	9
	1,200-1,299	10
	1,300 and over	11

Table 1 -- Descriptive traits in a sample system of grading and describing cattle (Cont'd)

Descriptive Trait :	Explanation	: Keypunching Code
Grade	High choice (cattle have above average frame, muscle development, and size for age; and produce USDA Choice quality grade, yield grade 1 and 2 carcasses)	HC
	Low choice (cattle have average or below frame, muscle development, and size for age; and produce USDA Choice quality grade, yield grade 3, 4, and 5 carcasses)	LC
	Good (cattle have average or below frame, muscle development, and size for age but lack genetic potential or are mismanaged; and produce USDA Good quality grade, yield grade 1, 2, and 3 carcasses)	GD
	Standard (cattle lack frame, muscle development, and genetic potential; and produce USDA Good quality grade, yield grade 4 and 5, or lower quality grade carcasses)	ST
Herd class	A (all herd bulls are performance tested; all cows and replacement heifers are sired by performance tested bulls)	A
	B (all herd bulls are performance tested; one-half or more of cows and replacement heifers are sired by performance tested bulls)	B
	C (all herd bulls are performance tested; less than one-half of cows and replacement heifers are sired by performance tested bulls)	C
	D (not all bulls are performance tested)	D
Condition	Thin	T
	Normal	N
	Fleshy or fat	F

Table 2--Summary of hypothetical feeder cattle consignments,
by descriptive trait

Descriptive trait	:	Number of head	:	Percent of total ^{1/}
Cattle class --				
Feeder steers, heifers, and bulls (A)		1,172		100
Sex --				
Steers (S)		727		62
Heifers (H)		445		38
Weight --				
0-399 (1)		299		26
400-499 (2)		442		38
500-599 (3)		255		22
600-699 (4)		133		11
700-799 (5)		43		4
Grade --				
High choice (HC)		325		28
Low choice (LC)		455		39
Good (GD)		330		28
Standard (ST)		62		5
Herd class --				
A (A)		95		8
B (B)		49		4
C (C)		379		32
D (D)		649		55
Condition --				
Thin (T)		99		8
Normal (N)		958		82
Fleshy or fat (F)		115		10

^{1/} Total in each group of descriptive traits does not equal
100 percent due to rounding.

Table 3 -- Price differences of feeder cattle for a hypothetical feeder cattle auction, by descriptive trait

Descriptive trait		Price difference (\$/cwt.)
Sale lot size (number of head):		
1		-1.68
2-9 (Base)	<u>1/</u>	--
10-19		1.63
20-39		1.85
40 +		2.45
Sex and weight:		
Steers	-	
	0-399 (lbs.)	1.53
	400-499 (Base)	--
	500-599	-1.93
	600-699	-3.04
	700-799	-4.07
Heifers	-	
	0-399	-3.41
	400-499	-4.98
	500-599	-5.04
	600-699	-5.90
	700-799	-6.57
Grade:		
HC		1.37
LC (Base)		--
GD		-1.12
ST		-3.57
Herd class:		
A		1.92
B		.95
C (Base)		--
D		- .19
Condition:		
T		.78
T/N		.52
N/T		.26
N (Base)		--
N/F		- .06
F/N		- .11
F		- .16

1/ Price for a base lot of feeder cattle was \$34.62 per hundredweight.

Table 4--Average increase in gross revenue per head per consignor
for a hypothetical feeder cattle auction by number of
head consigned

Number of head consigned	:	Number of consignors	:Average increase in gross : revenue per head per : consignor (\$/cwt.)
1-10	:	11	6.74
11-20	:	15	6.56
21-30	:	13	4.99
31-40	:	3	3.39
41-50	:	4	4.94
51 and over	:	4	3.19

SAMPLE MARKETING AGREEMENT SUMMARY FORM

A. Cattle inventory, January 1, 19__.

		<u>Number of head</u>		
		<u>Beef</u>	<u>Dairy</u>	<u>Total</u>
1	Cows that have calved	_____	_____	_____
2	Replacement heifers over 500 pounds	_____	_____	_____
3	Bulls (for breeding) over 500 pounds	_____	_____	_____
4	Steers, nonreplacement heifers, and bulls (not for breeding) over 500 pounds	_____	_____	_____
5	Steers, heifers, and bulls under 500 pounds	_____	_____	_____

B. Increase in cattle numbers, January 1 to December 31, 19__.

		<u>Number of head</u>		
		<u>Beef</u>	<u>Dairy</u>	<u>Total</u>
1	Purchase of cows that have calved and replacement heifers over 500 pounds	_____	_____	_____
2	Purchase of bulls (for breeding) over 500 pounds	_____	_____	_____
3	Purchase of steers, nonreplacement heifers, and bulls (not for breeding)	_____	_____	_____
4	Purchases of steers, heifers, and bulls under 500 pounds	_____	_____	_____
5	Calf crop	_____	_____	_____

C. Marketings of feeder steers, heifers, and bulls, January 1
to December 31, 19__.

-- Sex --

<u>Month</u>	<u>Number of head</u>		
	<u>Steers</u>	<u>Heifers</u>	<u>Bulls</u>
January	_____	_____	_____
February	_____	_____	_____
March	_____	_____	_____
April	_____	_____	_____
May	_____	_____	_____
June	_____	_____	_____
July	_____	_____	_____
August	_____	_____	_____
September	_____	_____	_____
October	_____	_____	_____
November	_____	_____	_____
December	_____	_____	_____

-- Weight --

<u>Month</u>	<u>Number of head</u>						
	<u>0-399</u>	<u>400-499</u>	<u>500-599</u>	<u>600-699</u>	<u>700-799</u>	<u>800-899</u>	<u>900-999</u>
January	_____	_____	_____	_____	_____	_____	_____
February	_____	_____	_____	_____	_____	_____	_____
March	_____	_____	_____	_____	_____	_____	_____
April	_____	_____	_____	_____	_____	_____	_____
May	_____	_____	_____	_____	_____	_____	_____
June	_____	_____	_____	_____	_____	_____	_____
July	_____	_____	_____	_____	_____	_____	_____
August	_____	_____	_____	_____	_____	_____	_____
September	_____	_____	_____	_____	_____	_____	_____
October	_____	_____	_____	_____	_____	_____	_____
November	_____	_____	_____	_____	_____	_____	_____
December	_____	_____	_____	_____	_____	_____	_____

-- Grade --

<u>Month</u>	<u>Number of head</u>			
	<u>High choice</u>	<u>Low choice</u>	<u>Good</u>	<u>Standard</u>
January	_____	_____	_____	_____
February	_____	_____	_____	_____
March	_____	_____	_____	_____
April	_____	_____	_____	_____
May	_____	_____	_____	_____
June	_____	_____	_____	_____
July	_____	_____	_____	_____
August	_____	_____	_____	_____
September	_____	_____	_____	_____
October	_____	_____	_____	_____
November	_____	_____	_____	_____
December	_____	_____	_____	_____

-- Integration plans --

<u>Month</u>	<u>Number of head</u>		
	<u>A</u>	<u>B</u>	<u>C</u>
January	_____	_____	_____
February	_____	_____	_____
March	_____	_____	_____
April	_____	_____	_____
May	_____	_____	_____
June	_____	_____	_____
July	_____	_____	_____
August	_____	_____	_____
September	_____	_____	_____
October	_____	_____	_____
November	_____	_____	_____
December	_____	_____	_____

D. Marketings of slaughter steers, heifers, and bulls, January 1 to December 31, 19____.

-- Sex --

<u>Month</u>	<u>Number of head</u>		
	<u>Steers</u>	<u>Heifers</u>	<u>Bulls</u>
January	_____	_____	_____
February	_____	_____	_____
March	_____	_____	_____
April	_____	_____	_____
May	_____	_____	_____
June	_____	_____	_____
July	_____	_____	_____
August	_____	_____	_____
September	_____	_____	_____
October	_____	_____	_____
November	_____	_____	_____
December	_____	_____	_____

-- Weight --

<u>Month</u>	<u>Number of head</u>										
	0- 399	400- 499	500- 599	600- 699	700- 799	800- 899	900- 999	1,000- 1,099	1,100- 1,199	1,200- 1,299	1,300- and over
January											
February											
March											
April											
May											
June											
July											
August											
September											
October											
November											
December											

-- Grade --

<u>Month</u>	<u>Number of head</u>			
	<u>High Choice</u>	<u>Low Choice</u>	<u>Good</u>	<u>Standard</u>
January	_____	_____	_____	_____
February	_____	_____	_____	_____
March	_____	_____	_____	_____
April	_____	_____	_____	_____
May	_____	_____	_____	_____
June	_____	_____	_____	_____
July	_____	_____	_____	_____
August	_____	_____	_____	_____
September	_____	_____	_____	_____
October	_____	_____	_____	_____
November	_____	_____	_____	_____
December	_____	_____	_____	_____

-- Integration Plans --

<u>Month</u>	<u>Number of head</u>
	E
January	_____
February	_____
March	_____
April	_____
May	_____
June	_____
July	_____
August	_____
September	_____
October	_____
November	_____
December	_____

E. Marketings of cull cows and herd bulls, January 1 to
December 31, 19____.

-- Sex --

<u>Month</u>	<u>Number of head</u>	
	<u>Cows</u>	<u>Bulls</u>
January	_____	_____
February	_____	_____
March	_____	_____
April	_____	_____
May	_____	_____
June	_____	_____
July	_____	_____
August	_____	_____
September	_____	_____
October	_____	_____
November	_____	_____
December	_____	_____

-- Weight --

<u>Month</u>	<u>Number of head</u>							
	600- 699	700- 799	800- 899	900- 999	1,000- 1,099	1,100- 1,199	1,200- 1,299	1,300 & over
January	_____	_____	_____	_____	_____	_____	_____	_____
February	_____	_____	_____	_____	_____	_____	_____	_____
March	_____	_____	_____	_____	_____	_____	_____	_____
April	_____	_____	_____	_____	_____	_____	_____	_____
May	_____	_____	_____	_____	_____	_____	_____	_____
June	_____	_____	_____	_____	_____	_____	_____	_____
July	_____	_____	_____	_____	_____	_____	_____	_____
August	_____	_____	_____	_____	_____	_____	_____	_____
September	_____	_____	_____	_____	_____	_____	_____	_____
October	_____	_____	_____	_____	_____	_____	_____	_____
November	_____	_____	_____	_____	_____	_____	_____	_____
December	_____	_____	_____	_____	_____	_____	_____	_____

-- Grade --

<u>Month</u>	<u>Number of head</u>			
	<u>High choice</u>	<u>Low choice</u>	<u>Good</u>	<u>Standard</u>
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

-- Integration Plans --

<u>Month</u>	<u>Number of head</u>		
	<u>B</u>	<u>D</u>	<u>E</u>
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

SAMPLE MARKETING (TELEAUCTION) CONSIGNMENT FORM

A. Auction date _____, 19____

Cattle class: Feeder steers, heifers, and bulls.

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
S = Steers	1 = 0-399	HC = High choice	A = Bulls, 100% performance tested (PT)	T = Thin
H = Heifers	2 = 400-499	LC = Low choice	Cows and replacement heifers,	N = Normal
B = Bulls	3 = 500-599	GD = Good	100% sired by PT bulls	F = Fleshy or fat
	4 = 600-699	ST = Standard	B = Bulls, 100% PT	
	5 = 700-799		Cows and replacement heifers,	
	6 = 800-899		50-99% sired by PT bulls	
	7 = 900-999		C = Bulls, 100% PT	
			Cows and replacement heifers,	
			0-49% sired by PT bulls.	
			D = Bulls, 0-99% PT	

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<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
1.	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____
10.	_____	_____	_____	_____	_____

B. Auction date _____, 19____

: Slaughter steers, heifers, and bulls.

<u>Weight</u>		<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
1 =	0- 399	HC = High choice	A = Bulls, 100% performance tested (PT)	T = Thin
2 =	400- 499	LC = Low choice	Cows and replacement heifers,	N = Normal
3 =	500- 599	GD = Good	100% sired by PT bulls	F = Fleshy or fat
4 =	600- 699	ST = Standard	B = Bulls, 100% PT	
5 =	700- 799		Cows and replacement heifers,	
6 =	800- 899		50-99% sired by PT bulls	
7 =	900- 999		C = Bulls, 100% PT	
8 =	1,000-1,099		Cows and replacement heifers,	
9 =	1,100-1,199		0-49% sired by PT bulls.	
10 =	1,200-1,299		D = Bulls, 0-99% PT	
11 =	1,300 & over			

<u>Number of head</u>	<u>Weight</u>	<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____

C. Auction date _____, 19 _____

Cattle class: Cull cows and herd bulls.

<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
S = Steers	1 = 0-399	HC = High choice	A = Bulls, 100% performance tested (PT)	T = Thin
H = Heifers	2 = 400-499	LC = Low choice	Cows and replacement heifers,	N = Normal
	3 = 500-599	GD = Good	100% sired by PT bulls	F = Fleshy or fat
	4 = 600-699	ST = Standard	B = Bulls, 100% PT	
	5 = 700-799		Cows and replacement heifers,	
	6 = 800-899		50-99% sired by PT bulls	
	7 = 900-999		C = Bulls, 100% PT	
			Cows and replacement heifers,	
			0-49% sired by PT bulls.	
			D = Bulls, 0-99% PT	

<u>Number of head</u>	<u>Sex</u>	<u>Weight</u>	<u>Grade</u>	<u>Herd class</u>	<u>Condition</u>
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

ANALYSIS OF TELEAUCTION RESULTS

Two examples of how teleauction results can be analyzed for producers are presented. They use the hypothetical consignment and price data in the description marketing and pooling example. Each example requires additional interpretation to be most useful to producers.

The first example is a simple summary of sale lots and number of head sold by descriptive trait, with a weighted average price for each trait (table 5). ^{4/} It shows the relative value buyers placed on each descriptive trait. General--not specific--price differences are provided in this procedure because interrelationships between traits are not accounted for in the computation. For example, the average price paid for feeder cattle from B herds was \$35.44 per hundredweight; and from A herds, \$35.29. However, in the process of assigning prices to pooled lots, it was assumed that feeder cattle from A herds received a \$.97 per hundredweight premium over those from B herds. If feeder cattle from B herds had been sold in 30 to 39 head lots; and those from A herds, in 2 to 9 head lots, that could explain the discrepancy. Simple summarization does not enable that type of analysis and interpretation. It does show general relationships and over time provides reasonably clear buyer preferences, though not specific price differences for those preferences. In the example, larger lots are preferred to smaller lots, but the difference between 2 to 9 head lots and 30 to 39 head lots is not necessarily \$3.82 per hundredweight.

More refined analyses consider interrelationships among descriptive traits and produce more accurate price differences among traits. Two possible statistical methods are multiple linear regression and analysis of variance. A multiple linear regression analysis of the hypothetical feeder cattle auction was conducted and results are presented in table 6. ^{5/} Note that, as expected, price differences are similar to those assigned to prepooled and pooled lots (refer to table 3).

^{4/} See previous footnote.

^{5/} The procedure is discussed in Albert G. Madsen and Zeng Rung Liu, Pricing Feeder Cattle at Colorado Auctions, Colorado Agricultural Experiment Station Technical Bulletin 114, June 1971.

Table 5--Hypothetical feeder cattle auction summary, by
descriptive traits

Descriptive trait	: Number : of : lots	: Number : of : head	: Weighted : average price : (\$/cwt.)
Total	106	1,172	33.94
Sale lot size (number of head) --			
1	12	12	28.21
2-9	42	200	31.85
10-19	34	456	33.34
20-29	10	239	35.48
30-39	7	225	35.67
40 and over	1	40	34.11
Sex and weight --			
Steers:			
0-399 (pounds)	11	144	36.98
400-499	17	281	36.38
500-599	14	176	34.47
600-699	9	93	33.33
700 and over	6	33	31.94
All steers	57	727	35.44
Heifers:			
0-399	13	155	32.67
400-499	14	161	31.68
500-599	11	79	30.77
600-699	7	40	28.56
700 and over	4	10	27.52
All heifers	49	445	31.49
Grade --			
HC	30	325	35.35
LC	38	455	34.20
GD	24	330	32.84
ST	14	62	30.56
Herd class --			
A	15	95	35.29
B	12	49	35.44
C	37	379	33.90
D	42	649	33.66
Condition --			
T	3	8	32.51
T/N	--	--	--
N/T	25	410	33.72
N	41	332	33.50
N/F	26	381	34.80
F/N	3	23	34.27
F	8	18	29.05

Table 6--Price differences of descriptive traits, derived by multiple linear regression analysis of a hypothetical feeder cattle auction 1/

Descriptive trait	Price difference from: : base (regression : : coefficient) (\$/cwt.):	t value <u>2/</u>
Base price (regression intercept)	36.20	--
Sale lot size (number of head) --		
1	-3.42	-29.50
2-9	-1.72	-24.26
10-19 (base)	--	--
20-29	.23	2.33
30 and over	.34	3.17
Sex and weight --		
Steers:		
0-399 (pounds)	1.45	14.25
400-499 (base)	--	--
500-599	-1.97	-20.97
600 and over	-3.37	-33.07
Heifers:		
0-399	-3.34	-33.78
400-499	-4.96	-51.36
500-599	-4.95	-43.74
600 and over	-6.00	-48.46
Grade --		
HC	1.35	20.32
LC (base)	--	--
GD	-1.12	-15.56
ST	-3.41	-33.13
Herd class --		
A	1.88	19.94
B	1.12	10.62
C (base)	--	--
D	-.13	-1.94
Condition --		
T and T/N	1.06	6.28
N/T	.35	4.39
N (base)	--	--
N/F	.00	0.06
F and F/N	-.34	-3.58

1/ 2

s at the 95 percent confidence

